



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

March 21, 2000  
Office of the Secretary  
Federal Communications Commission  
445 12th Street, SW, Room TW-A325  
Washington, DC 20554

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Health Resources and  
Services Administration  
Rockville MD 20857

RECEIVED

MAR 21 2000

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

Re: Universal Service (CC Docket Nos. 96-45) "Rural Health Care for Insular Areas"

Dear Secretary,

The purpose of this letter is to provide a public record of an ex-parte meeting on February 15<sup>th</sup>, at the Federal Communications Commission (FCC) between staff from the FCC and Department of Health and Human Services (DHHS). Cathy Wasem, Director of Telemedicine and Joanne Kumekawa, Director of Policy, Office for the Advancement of Telehealth (OAT), Health Resources and Services Administration of DHHS met with Ellen Blackler, Special Assistant to the Chief of the Common Carrier Bureau, (CCB) Praveen Goyal, Attorney Advisor, CCB, Mark Nadel, Attorney Advisor, CCB and Richard Smith, Attorney Advisor, CCB.

During this meeting, which focused on Universal Service and the U.S. affiliated Pacific Jurisdictions, Ms. Wasem and Kumekawa outlined the major demographic and health care issues facing the Pacific insular islands that make them unique to the Rural Health Care Program. In particular, they emphasized the area's high poverty rate, geographic isolation, and lack of adequate health care. Despite these challenges, the U.S. Pacific Jurisdictions do not benefit from the Rural Health Care program as it now stands because communities designated as "urban" by the FCC do not have a tertiary hospital with specialty and subspecialty care. In fact, because no Pacific insular community has more than 50,000 people, the FCC has simply designated the community with the highest population as "urban." Consequently, Wasem and Kumekawa recommended that the FCC designate the closest US urban area (i.e. a community with a population of 50,000 or more), such as Honolulu, Hawaii, as the "urban area" equivalent for the Jurisdictions.

OAT staff also recommended that all of the US- affiliated Pacific Basin Jurisdictions be eligible for the Rural Health Care Program. That is, in addition to American Samoa, Guam and the Commonwealth of the Northern Marianas Islands (CNMI) which are currently eligible, OAT recommended that the Freely Associated States (FAS) - the Federated States of Micronesia, Republic of the Marshall Islands, and the Republic of Palau also be eligible. There are historic, treaty and health reasons for this recommendation. The latter three jurisdictions are freely associated with the United States, meaning they are politically independent but have each signed Compacts of Free Association with the United States establishing specific rights and responsibilities.<sup>1</sup> A key component of these compacts has been agreements about health care services. If a wide gap in income and health status emerges between the U.S. territories/commonwealth and the FAS because one group of jurisdictions is able to participate in the Rural Health Care Program and the other is not, there may be greater immigration from FAS to CNMI, Guam, or other U.S. states, with the potential for problems related to the spread of infectious diseases such as TB, as well as economic problems.

<sup>1</sup> The FSM and RMI signed their compacts in 1986, Palau in 1994. Prior to that time, the United States had administrative control over these islands. Each compact provides for developmental assistance and cedes full authority and responsibility for the jurisdiction's defense to the United States.


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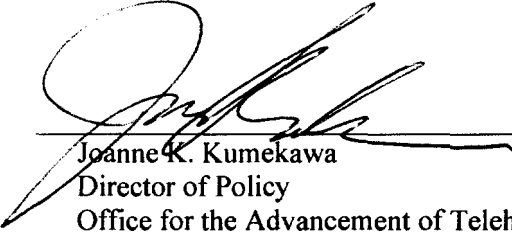
In addition to their recommendations, Kumekawa and Wasem raised the issue of whether or not satellite services would be eligible for Rural Health Care Program discounts. Currently, the FCC has deemed satellite services as eligible under certain circumstances in Alaska.

Kumekawa and Wasem pointed out that American Samoa, the Federated States of Micronesia, the Republic of the Marshall Islands and the Republic of Palau have access to satellite services, only. Given that satellite is the only means by which these areas can access telemedicine and telehealth, it seems reasonable that this telecommunications service would be eligible for discounts, especially since Congress' intent in the Telecom Act of 1996 was to increase rural Americans' access to needed health care services. The law neither dictates how these health services should be provided nor what technologies should be used to deliver health care services and education.

*"A telecommunications carrier shall, upon receiving a bonafide request, provide telecommunications services which are necessary for the provision of health care services in a State, ...at rates that are reasonably comparable to rates charged for similar services in urban areas in that State." - Telecom Act 1996*

OAT staff promised to provide the FCC with further information from the Pacific Jurisdictions regarding telecommunication service rates in the Pacific Jurisdictions and Honolulu, Hawaii - one of the closest urban areas with specialty and subspecialty health care services.

  
Cathy Wasem  
Director of Telemedicine  
Office for the Advancement of Telehealth  
Health Resources and Services Administration  
Department of Health and Human Services

  
Joanne K. Kumekawa  
Director of Policy  
Office for the Advancement of Telehealth  
Health Resources and Services Administration  
Department of Health and Human Services

CC: Ellen Blackler, Special Assistant, CCB  
Linda Armstrong, Assistant Chief, Accounting, CCB  
Lisa Boehlery, Team Leader, Accounting, CCB  
Praveen Goyal, Attorney Advisor, Accounting, CCB  
Mark Nadel, Attorney Advisor, Accounting, CCB

#### Attachments

- 1) Meeting handouts for 2/16/2000
- 2) Summary of subsequent phone conversations with Praveen Goyal, Attorney Advisor, CCB, FCC
- 3) Table of Insular Area Telecommunications costs, OAT sent to the FCC, 3/15/2000
- 4) Email correspondence between OAT and Norman Okamura, PhD., University of Hawaii
- 5) Fax correspondence between the Pacific Jurisdictions and OAT

## Attachment 1

# Universal Service & Health Care In Insular Areas

**PURPOSE OF MEETING:** To discuss insular areas unique concerns regarding the availability of affordable and appropriate telecommunications services for the practice of telemedicine.

**BACKGROUND:** The Office for the Advancement of Telehealth (OAT) supports 41 telemedicine grantees, which represent over 300 rural telemedicine sites. The Universal Service Program is important to our rural health care providers because it potentially offers greater affordability for telecommunications services, which currently account for between 18% and 30% of our grantees' overall telemedicine costs. In insular areas, telecommunications services costs are much higher as a percentage of overall costs.

Additionally, while telecommunications service costs are of concern, the insular areas' lack of adequate health care and telecom infrastructure as well as geographic and demographic problems create unique needs, which make the current structure of the Universal Service Program insufficient to meet these needs.

- ◆ The Pacific Jurisdictions' governments generally provides health care at their facilities and if care is not available on the island, the Jurisdictions often pay for off-island transportation and medial care, which has resulted in a serious drain on the Jurisdictions.
  - *In some years the Jurisdictions have spent between 20-30 and even as high as 60 percent of their health care budgets on costly off-island transportation and referrals, benefiting only a few patients.*
- ◆ All Jurisdictions have shortages of trained health care professionals and several areas of the Jurisdictions have been designated as primary care, dental and mental health, Health Professional Shortage Areas. In addition, practitioners in the Jurisdictions are often faced with inadequate facilities and unavailable equipment.
- ◆ In the Pacific Jurisdictions, only Hawaii has reliable tertiary health care available.
  - *Other main land US cities such as SF and LA would also offer tertiary health care.*
- ◆ These Jurisdictions have limited access to broadband telecom services.
  - *Most small island do not have access to broadband telecom infrastructure or basic telecom infrastructure.*
  - *Moreover, the small population base on these islands makes it uneconomical to develop an extensive telecommunications infrastructure*
  - *Many islands use radiophones to communicate from island to island.*
- ◆ Our grantees in these areas have unique geographic, demographic and health care circumstances that make the current structure of the Universal Service Program insufficient to meet their needs.
  - *The Pacific insular areas have a population of fewer than 500,000 people on 104 inhabited islands spread over an area larger than that of the continental United States.*
  - *The majority of the population in these Jurisdictions are below the Federal poverty level*

**FCC decision to change from Urban rural –How will this affect the calculation of satellite services?**

- ◆ PEACESAT of the National Telecommunications and Information Administration provides affordable but very limited and sometimes unreliable satellite services to the area. Any other satellite provider would be much more expensive.
  - *PEACESAT provides analog satellite communications to serve educational, economic development, medical and cultural needs of many Pacific nations and territories.*
  - *Each earth terminal can transmit only one voice or data signal at a time. Total capacity is currently 13 channels of audio and data communications.*
  - *Greater need for digital services and greater access to higher speed data, compressed video and concurrent voice and data services. PEACESAT is beginning to migrate toward digital.*

## **PARTICIPANTS:**

**Cathy Wasem:** Director of Telehealth/Telemedicine Programs and Evaluation (OAT). Health Resources and Services Administration of the Department of Health and Human Services  
 Ms. Wasem served as the federal Office of Rural Health Policy's Director of Telemedicine and Information Services before joining OAT. Prior to her current federal service, Ms. Wasem started and directed Oglala Lakota College's nursing program on the Pine Ridge Reservation and a Health Careers Opportunity Program at Sinte Gleska University on the Rosebud Reservation. Ms. Wasem has also served as a clinical nurse at the U.S. Public Health Service Hospital – Seattle at a rural Indian Health Service hospital on the Rosebud Reservation. She received her BA (Germanics) and BS (Nursing) from South Dakota State University and her MN from the University of Washington. She studied German health policy as a Fulbright/DAAD scholar in Cologne, Germany. Ms. Wasem is a Captain in the U.S. Public Health Service Commissioned Corps.

**Joanne Kumekawa,** Director of Telehealth Policy Development, (OAT)  
 Prior to her work in telemedicine, Ms. Kumekawa served most recently as a senior advisor to the Assistant Secretary of Commerce for Telecommunications and Information. She has also served as a Strategic Planner at the International Telecommunications Union, a special agency of the United Nations in Geneva, Switzerland, and as an FCC Telecommunications Policy Analyst in the Office for Plans and Policy and in the Auctions Bureau on a detail. She received her BA in Economics from Yale University and an MBA from the Wharton School of Business, University of Pennsylvania.

**FCC contact number: Mr. Praveen Goyal, 202-418-7149**

## **Attachment 2**

Summary of subsequent phone conversations with Praveen Goyal, Attorney Advisor, CCB, FCC.  
Phone conversation on March 14, 2000.

Cathy Wasem and Joanne Kumekawa of OAT discussed whether or not satellite services would be considered eligible for Rural Health Care discounts. They asked about the FCC's view of consortia with E-rate networks.

### Attachment 3

#### INSULAR AREA, RURAL TELEMEDICINE AND DISTANCE LEARNING TELECOMMUNICATIONS COSTS -p1

Jurisdiction Name	Possible Rural Health Care Facilities Links	Telecom Provider(s) Name	Lowest Bid Price for T-1 Line / Year (1)	Network Technology (available)	Urban Area Name (2)
American Samoa	LBJ Tropical Memorial Hospital. American Samoa Department of Health and its Dispensaries, American Samoa Community College. The government agencies would share a link.	American Samoa Telecom Authority, Blue Sky Telecoms	\$ 780,000	ONLY satellite telecom carriers	Honolulu Hawaii
CNMI	Commonwealth Health Center, Northern Marianas College, Clinics on Tinian and Rota. The agencies would share a link.	IT&E, Startec+ PCI and GTE Pacifica	\$ 204,000	Satellite and fiber optics wireline	Honolulu Hawaii
GUAM	Guam Memorial Hospital Authority, University of Guam, Department of Health. The government agencies would share the link.	IT&E, Star Tec + PCI, MCI/ World Com, Sprint, GTE Pacifica	\$ 245,000	Satellite and fiber optics wireline	Honolulu Hawaii
<b>Subtotal for US Territories and Commonwealth</b>			<b>\$ 1,229,000</b>		
Federated States of Micronesia (3)	The Agencies of the FSM would share a link to Hawaii and other locations	Federated States of Micronesia Telecom- A government monopoly	\$ 780,000	ONLY satellite telecom, very little off-island network connection	Honolulu Hawaii
Republic of Marshall Islands/ Republic of Palau (3)	NA	Both the Republic of Marshall Islands and Republic of Palau have Government Telecom Monopolies	NA	ONLY Satellite	Honolulu, Hawaii
<b>Sub total for FAS*</b>			<b>\$ 780,000</b>		
<b>TOTAL for US Affiliated Pacific Basin Jurisdictions</b>			<b>\$ 2,009,000</b>		

\* Freely Associated States include: the Federated States of Micronesia, Republic of the Marshall Islands, and the Republic of Palau.

1) These bids for T-1 lines (or their capacity equivalent) were for E-rate subsidy in the area (1999/2000)

2) The Urban Area that the Jurisdiction would anticipate linking to for telemedicine consultations.

3) No government, education, or health agencies have any dedicated off-island capacity.

# **PACIFIC BASIN CONTACT NAMES**

p2

Jurisdiction Name	Health Contact Name	Telecom Contact Name	Internet Access (4)
American Samoa	John Chase, SSDI System Developer, ASG-DOH, email: j_chase@hotmail.com	Numerous contacts	Access but requires further funding
CNMI	Joseph C. Santos, Administrator, DOH, Tel:670-682-2877, Fax: 670-235-2877	MS. Kelly Bruce, GTE Pacifica, tel: 670-682-2877, fax: 670-235-2877	Limited Access none at Tinian or Rota clinics
GUAM (5)	Mr. Dennis Rodriguez, Dept. of Public Health, tel:671-735-7102, fax: 671-734-5910, email: dennisr@ns.gov.gu	Quote obtainable from: Mike Pagelinan, Dept of Education Procurement: E-rate bid quotes	Access but needs funding to continue
Federated States of Micronesia	NA	Mr. Samuel Falanruw, Manager, FSM Telecom Corporation, tel: 691-350-2104, fax: 691-350-4115	Limited access with very high costs: \$19.95/mth +\$2.00 per hour
YAP**	Dr. Victor Ngaden, Director YAP State Health Services, tel:691-350-2115, fax:691-350-3444, email: directordhsyap@mail.fm	Henry Falan, Department of Education, YAP. Tel: 691-350-2150, Fax:691-350-2339 (E-rate bids)	NO
Republic of Marshall Islands	NA	NA	Limited access: \$60/mth + \$2.00 per hour
Republic of Palau	NA	NA	Limited access: \$19.00/mth + \$2.00 per hour.

\*\* Yap is part of the Federated States of Micronesia

4) Does the Jurisdiction have access to the Internet?

5) Mr. Bruce Best, University of Guam, completed the survey for Guam. tel:617-735-2620/1 Fax:671-734-8377, bbest@uog.9.uog.edu

Mr. Best is often in contact with the other Jurisdictions on this issue

#### Attachment 4

Author: "Norman H. Okamura" <norman@elele.peacesat.hawaii.edu> at INTERNET  
Date: 03/14/2000 8:53 AM  
Priority: Normal  
TO: Cathy Wasem at ~OA\_2, Paul Nannis at ~OA\_2, Joanne Kumekawa at ~OA\_2,  
Lynnette Araki at ~OA\_2  
Subject: Universal service and the Pacific

Cathy and Joanne:

This is in response to your questions.

1. On satellites - I hope that the FCC DOES NOT differentiate among different types of transmission facilities for the Pacific but continues to rely on distance and capacity. Realize that in American Samoa, there is only satellite telecommunications since there is no fiber optics cable or undersea coaxial cable. American Samoa is 2500 miles away from Hawaii. Hawaii is 2550 miles away from Los Angeles. Los Angeles is 2400 miles away from DC. Please ask the FCC if there is anything that they are aware of that related to satellites that would prejudice the ability of American Samoa to use the universal service program for health care. Just FYI - the bids for E-Rate telecommunications in Guam and CNMI explicitly noted that it is capacity that is required, not a specific transmission medium, especially since some of the US carriers have satellite earth stations in these locations. The bids did include Bit Error Rate (BER) requirement so that the links would be solid. This is a standard practice in the industry.

The RHD Web Site states:

"What does it mean to HCPs?

Support is available for eligible telecommunication services with a bandwidth equal to or less than 1.544 Mbps. Support is also available for limited long distance charges for accessing the Internet. The level of support depends on the HCPs location and the type of service chosen - it will be calculated individually for each HCP. A HCP can save on a service it already has or upgrade. A HCP can find out its level of support and what its total service charge will be before committing to a telecommunications service."

This is a capacity based criterion and this will work in American Samoa, if there are no other impediments. The distance sensitivity of the FCC policy is fair since the vast majority of HCPs are handicapped by the "distance sensitivity" considerations of tariffs. If Honolulu is designated as the urban center, then, the cost of the link for the LBJ Tropical Medical Center and the Department of Health should be the same as a Honolulu provider on the neighbor islands.

I wish that the FCC, in a footnote, would explicitly state some like: "The effect of the ruling is that the cost of the link for the American Samoa, Guam, and CNMI Health Care Providers should be the same as a Honolulu provider on the neighbor islands." This would provide explicit policy guidance to the Universal Service Administrative Company.

2. On the issue of Consortia - Yes. Under the SLD, a Consortium can apply for E-Rate Funding. The Consortium can include a health care provider. However, the E-Rate requires that non-qualifying members (e.g. institutions that are not K-12 schools or public libraries) be responsible for their pro-rata cost for the use of the links. Since the HCPs in the Pacific are disadvantaged by the current definition of the "urban area," the pro-rata cost to the health care provider would not be discounted, unless, of course, the definition of the urban area is redefined by the FCC. So, the



Consortia does not work in the Pacific without the "urban area" change. A redefinition of the "urban area" would now enable the Consortia to work. The fine tuning of the policy needs to be worked out. Again, I hope that a simple footnote stating that the effect of the ruling is that the cost of the link for the American Samoa, Guam, and CNMI Health Care Providers should be the same as a Honolulu provider on the neighbor islands." This will help to minimize any misinterpretations.

I am glad that you folks are continuing to raise these issues.

If the FCC looks like it will treat satellite issues separately, then, please let me know since we will need the American Samoa Telecommunications Authority to raise this issue directly with the FCC and through the National Exchange Carriers Association (NECA).

If I can be of any other service, please let me know.

Thanks,

Norman

\*\*\*\*\*

Norman H. Okamura, Ph.D.

Associate Specialist

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University of Hawaii

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fax: (808) 956-8019; (808) 956-2512

pager: 680-5215; cell: 227-9339

\*\*\*\*\*

## **Attachment 5: Fax Correspondence between OAT and the Pacific Jurisdictions**

**(See attached)**

- 1) Fax from LBJ Tropical Medical Center, American Samoa**
- 2) Fax from University of Guam**
- 3) Fax from the Commonwealth of the Northern Mariana Islands, Department of Public Health**
- 4) Fax from the State of Yap**



**L B J Tropical Medical Center**  
P.O. Box LBJ  
Pago Pago, American Samoa 96799



CRO2000-73 TJF/ds

**Office of the Chief Executive Officer**

March 17<sup>th</sup>, 2000

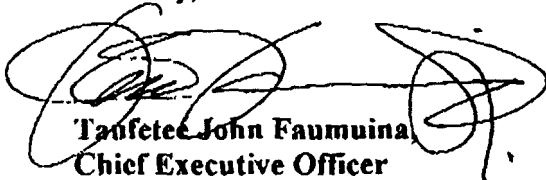
Joanne Kumekawa  
Director of Policy  
Office for the Advancement of Telehealth  
Health Resources & Services Administration  
U.S. Department of Health and Human Services

Dear Ms. Kumekawa:

Submitted for your review and action is the LBJ Tropical Medical Center's responses to the Rural Health Provider Universal Service Subsidy Information Request. I thank you for the opportunity to respond to this call for information in the hopes that it help us to realize some of our goals and objectives to improving health care delivery in American Samoa.

Should you have any questions or need clarification on any of the material, Mr. Ardie Roque, Information Systems Manager, and/or Sandy Ilaoa, Grants Coordinator of my staff are available at (684) 633-4049 or (684) 633-4590 at your convenience.

Sincerely,



**Tanfete John Faumuina**  
Chief Executive Officer

cc: Norman Okamura, TIP-G, UH Manoa  
Cathy Wassern, HRSA  
Ardie Roque, MIS

attachment

## UNIVERSAL SERVICE QUESTIONNAIRE FOR US-AFFILIATED PACIFIC BASIN JURISDICTIONS

1. What type of telecommunications connection would you like to use for telemedicine/distance education?

- Internet store-and-forward
- Telephone wire line (e.g., fiber optic or cable) or satellite for videoconferencing.
- Both

**Both store and forward and satellite video teleconferencing will be used. The applications include: teleradiology; continuing medical, nursing, and public health distance learning courses; clinical informatics; video teleconferencing consultations; patient-family and off-island medical referral consultations; etc.**

2. Do your main health facilities and remote clinics have access to the Internet?

**American Samoa is connected, but requires the funding from the Rural Health Care program of the Telecommunications Act to continue.**

- If yes, does it involve a long distance phone call to get to the Internet provider? If it does, the health provider can receive the lessor of 30 hours or \$180/ month to pay for the toll charges (i.e. long distance charges) The program only covers toll-charges, not the access fee (i.e. monthly charge from the service provider)

**American Samoa does not have toll charges for Internet access.**

- Is there a telecommunications provider(s) in your jurisdiction who is able to provide the telecommunications service(s) you want for telemedicine sessions with specialists in an urban area.   X   yes        no [see sheet A for the types of telecommunication services that are eligible to be subsidized under the Universal Service Program]

**Yes. There are two telecommunication service providers in American Samoa.**

- If yes, to which urban area(s) would you anticipate linking for telemedicine consultations?

**Honolulu to the State of Hawaii Telhealth Access Network (STAN). The network connects 16 hospitals, the Veterans Administration Medical and Regional Office Center (and 5 clinics), and the University of Hawaii John A. Burns School of Medicine and its Telemedicine Project. The UH Telemedicine Project and STAN interconnects 5 clinics as well.**

STAN also has 15 ISDN BRI's (128 Kbps each) that enables interconnection to sites with ISDN capabilities; three satellite downlinks (C and Ku Band) for satellite receive of CONUS programs; a multipoint conference bridge; high-speed access to the Internet (Internet 2 and through the Maui High Performance Computing Center); and is cross-connected with distance learning networks of the University of Hawaii and the Department of Education.

3. Is there more than one telecommunications provider in the jurisdiction who could provide the service?   X   yes        no [If yes, how many providers are there?   2  ]

**American Samoa has 2 major carriers that could provide the services needed: American Samoa Telecommunications Authority and Blue Sky Communications**

4. For each telecommunications provider, answer the following questions:

- Would the provider use a land-line connection (e.g., fiber optic cable under the ocean) or a satellite connection? (or does it have the option of either?)

**American Samoa ONLY has satellite telecommunication carriers. American Samoa is 2,556 miles away from Hawaii. Hawaii is 2,600 miles away from Los Angeles. There is no undersea fiber or coaxial cable to American Samoa.**

- **American Samoa Telecommunications Authority - Satellite Only!**
- **Blue Sky Telecommunications - Satellite Only!**

- Obtain a quote from each provider as to how much it would cost for each telecommunication service you would request. If the service can be provided either via satellite or land-line, obtain a quote for both services. *(In year 2 you can request up to a T1 connection. In Year 3, there is no limit in the bandwidth connection)*

**A competitive procurement will need to be followed for the territories of American Samoa and Guam, and also for the Commonwealth of the Northern Marianas Islands. Some of the services that are especially needed is an off-island network connection. See pricing below.**

- For each urban area in the United States you would anticipate linking to, obtain a quote for telecommunication services to that urban area. For example, if you anticipated that most of your consults would be done to Honolulu and you wanted to use a T1 link, you would obtain a quote for the service (e.g., T1) to Honolulu. If you thought you would consult with Honolulu and Los Angeles at 128kbs, you should obtain quotes for both urban areas at 128kbs. If you anticipate also linking remote clinics to specialists in the urban area, also obtain the cost for the service

for each remote site you would link. Your quote should include both a figure for any non-recurring cost and the cost of the service for a year.

**A T-1 was bid for the E-Rate Project in American Samoa in 1998. The lowest bid price from the American Samoa Telecommunications Authority is \$780,000. The next lowest bid was \$840,000 from the Interisland Systems Development and Integration.**

- How many health facilities in your jurisdiction would you want to link directly to the urban facility, recognizing that there is a cost for each link? *Please note, only public and private, non-profit facilities are eligible for the subsidy.*

**All of the Insular areas would want to interconnect their hospitals and higher education institutions. Telehealth and telemedicine involves computerized patient records, distance learning, nursing and medical workshops, and the line.**

**American Samoa - LBJ Tropical Medical Center, American Samoa Department of Health and its Dispensaries, American Samoa Community College and other private clinics. The government agencies would share a link.**

**UNIVERSAL SERVICE QUESTIONNAIRE  
FOR US-AFFILIATED PACIFIC BASIN JURISDICTIONS**

**Contact Information**

Jurisdiction: GUAM

Name of individual who filled out the questionnaire: BRUCE BEST

Title and Institution: Research Associate, University of Guam

Telephone: (671) 735-2620/1

Fax: (671) 734-8377

E-mail: bbest@uog9.uog.edu

Name of health care contact if different from above: Dennis Rodriguez  
Dept. of Public Health

Telephone: (671) 735-7102

Fax: (671) 734-5910

E-mail: dennisr@ns.gov.gu

Name of telecommunications company contact: Numerous

Name of telecommunications company: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

(Please provide a contact name for each telecommunications company from which a quote is obtained)

Note: Obtainable from Mike Pangelinan, Dept. of Education Procurement;  
Request: results of e-rate bid quotes

Attach this sheet when faxing responses to the Universal Service Subsidy  
Questionnaire to Joanne Kumekawa, Director Policy, Office for the Advancement of  
Telehealth, HRSA. [Fax: 301-443-1330] Please fax by March 1, 2000. Thank you.

## UNIVERSAL SERVICE QUESTIONNAIRE FOR US-AFFILIATED PACIFIC BASIN JURISDICTIONS

1. What type of telecommunications connection would you like to use for telemedicine/distance education?

- Internet store-and-forward
- Telephone wire line (e.g., fiber optic or cable) or satellite for videoconferencing.
- Both

**Both store and forward and satellite video teleconferencing will be used. The applications include: teleradiology; continuing medical, nursing, and public health distance learning courses; clinical informatics; video teleconferencing consultations; patient-family and off-island medical referral consultations; etc.**

2. Do your main health facilities and remote clinics have access to the Internet?

**Yes - to varying degrees.**

**American Samoa - American Samoa is connected, but requires the funding from the Rural Health Care program of the Telecommunications Act to continue.**

**CNMI has limited access, but not at the clinics on Tinian and Rota.**

**Guam has access, but requires qualification for the Rural Health Care program of the Telecommunications Act to continue.**

**FAS - There is limited access and use of the Internet due to the costs of the services.**

- **If yes, does it involve a long distance phone call to get to the Internet provider? If it does, the health provider can receive the lessor of 30 hours or \$180/ month to pay for the toll charges (i.e. long distance charges) The program only covers toll-charges, not the access fee (i.e. monthly charge from the service provider)**

**No. None of the Pacific Insular areas have toll charges for Internet access.**

**The cost of Internet is high in the Freely Associated States.**

- **The cost in the RMI is \$60 per month with a \$2.00 per hour charge.**
- **The cost in the FSM is \$19.95 with 5 free hours. A \$2.00 per hour charge follows.**
- **The cost in the Republic of Palau is \$19.00 per month with a \$2.00 charge per hour.**



- Is there a telecommunications provider(s) in your jurisdiction who is able to provide the telecommunications service(s) you want for telemedicine sessions with specialists in an urban area.   X   yes        no [see sheet A for the types of telecommunication services that are eligible to be subsidized under the Universal Service Program]

**Yes. There are many telecommunication service providers in American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands.**

**However, for the Federated States of Micronesia, Republic of the Marshall Islands, and the Republic of Palau have telecommunication monopolies and the cost of long distance communications is very high. No government, education, or health agencies have any dedicated off-island capacity. Video teleconferencing application for consultation does not exist due to the cost of telecommunications. Store and forward is very costly over the Internet due to the charges of the ISPs.**

- If yes, to which urban area(s) would you anticipate linking for telemedicine consultations?

**Honolulu to the State of Hawaii Telehealth Access Network (STAN). The network connects 16 hospitals, the Veterans Administration Medical and Regional Office Center (and 5 clinics), and the University of Hawaii John A. Burns School of Medicine and its Telemedicine Project. The UH Telemedicine Project and STAN interconnects 5 clinics as well.**

**STAN also has 15 ISDN BRIs (128 Kbps each) that enables interconnection to sites with ISDN capabilities; three satellite downlinks (C and Ku Band) for satellite receive of CONUS programs; a multipoint conference bridge; high-speed access to the Internet (Internet 2 and through the Maui High Performance Computing Center); and is cross-connected with distance learning networks of the University of Hawaii and the Department of Education.**

3. Is there more than one telecommunications provider in the jurisdiction who could provide the service?   X   yes        no [If yes, how many providers are there?       ]

**Guam has 5 different carriers that could provide the services needed: IT&E, Startec+PCI, MCI/Worldcom, Sprint, and GTE Pacifica. There are other smaller companies that could resell service.**

**CNMI has 3 major carriers that could provide the services needed: IT&E, Startec+PCI, and GTE Pacifica. There are other smaller companies that could resell service.**

**The Freely Associated States all have telecommunication monopolies and do not have an independent regulatory body.**

4. For each telecommunications provider, answer the following questions:

- Would the provider use a land-line connection (e.g., fiber optic cable under the ocean) or a satellite connection? (or does it have the option of either?)

**American Samoa ONLY has satellite telecommunication carriers. American Samoa is 2,556 miles away from Hawaii. Hawaii is 2,600 miles away from Los Angeles. There is no undersea fiber or coaxial cable to American Samoa.**

- **American Samoa Telecommunications Authority - Satellite Only!**
- **Blue Sky Telecommunications - Satellite Only!**

**Guam has fiber optics telecommunications carriers.**

- **GTE Pacifica, IT&E, Startec PCI, and MCI Worldcom have fiber optics.**

- **MCI Worldcom also has a satellite earth station.**

*IT&E have recently installed an earth station (testing)*  
**CNMI carriers have a combination of fiber optics and satellite telecommunications carriers.**

- **GTE Pacifica, IT&E, and Startec PCI have fiber optic connections.**
- **GTE Pacifica also has a satellite earth station.**

**The Freely Associated States only have satellite telecommunications. There is no fiber to any of the FAS.**

- Obtain a quote from each provider as to how much it would cost for each telecommunication service you would request. If the service can be provided either via satellite or land-line, obtain a quote for both services. *(In year 2 you can request up to a T1 connection. In Year 3, there is no limit in the bandwidth connection)*

*Guam data available from DOE Procurement (E-rate bid)*  
**A competitive procurement will need to be followed for the territories of American Samoa and Guam, and also for the Commonwealth of the Northern Marianas Islands. Some of the services that are especially needed is an off-island network connection. See pricing below.**

- For each urban area in the United States you would anticipate linking to, obtain a quote for telecommunication services to that urban area. For example, if you anticipated that most of your consults would be done to Honolulu and you wanted to use a T1 link, you would obtain a quote for the service (e.g., T1) to Honolulu. If you thought you would consult with Honolulu and Los Angeles at 128kbs, you should obtain quotes for both urban areas at 128kbs. If you anticipate also linking remote clinics to specialists in the urban area, also obtain the cost for the service

for each remote site you would link. Your quote should include both a figure for any non-recurring cost and the cost of the service for a year.

**A T-1 was bid for the E-Rate Project in Guam in January 2000. The bid price from GTE Pacifica is \$245,000 per year.**

**A T-1 was bid for the E-Rate Project in the CNMI in January 2000. The bid price from GTE Pacifica is \$204,000 per year.**

**A T-1 was bid for the E-Rate Project in American Samoa in 1998. The lowest bid price from the American Samoa Telecommunications Authority is \$780,000. The next lowest bid was \$840,000 from the Interisland Systems Development and Integration.**

**The estimated price of a T-1 from the Freely Associated States is about \$780,000. The price for the FAS must be negotiated to be competitive or be reduced. The FAS Insular areas needs to be looked at very differently. I would suggest that**

- **How many health facilities in your jurisdiction would you want to link directly to the urban facility, recognizing that there is a cost for each link? *Please note, only public and private, non-profit facilities are eligible for the subsidy.***

**All of the Insular areas would want to interconnect their hospitals and higher education institutions. Telehealth and telemedicine involves computerized patient records, distance learning, nursing and medical workshops, and the line.**

**American Samoa - LBJ Tropical Medical Center, Guam Memorial Hospital Authority, University of Guam, the Department of Health, and other private clinics. The government agencies would share a link.**

**Commonwealth of the Northern Marianas Islands - Commonwealth Health Center, Northern Marianas College, and Clinics on Tinian and Rota. The agencies would share the link.**

**Guam - Guam Memorial Hospital Authority, University of Guam, the Department of Health, and other private clinics. The government agencies would share a link.**

**Freely Associated States - The agencies of the FAS would share a link to the STAN and to other locations.**

**NOTE: The FCC should really consider the FAS as insular areas. However, if it does so, it should limit the capacity and the amount and either require**

**that the cost be controlled to be no more than 5% above cost or that the country open up to competition.**

**Please fax your response to Joanne Kumekawa, Director Policy, OAT: 301-443-1330 and provide the name of a Health Care contact & Telecommunications company contact.**



**Commonwealth of the Northern Mariana Islands**  
**Department of Public Health**

*Office of the Secretary of Public Health*

February 29, 2000

Ms. Cathy Wasem & Ms. Joanne KumeKawa  
Office for the Advancement of Telehealth  
Health Resources and Services Administration  
US Department of Health & Human Services  
Rockville, MD 20857

**Re: Additional Information Needed**

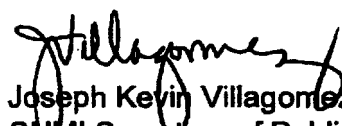
Greetings from the CNMI:

I received the memo that you provided us for the February 2000 Pacific Island Health Officer Association (PIHOA) Board of Directors meeting which was held two weeks ago in Koror, Palau.

I asked our Telehealth/Telemedicine Task Force Chairman, Mr. Joseph C. Santos, to provide the needed additional information. I am attaching his response to this letter.

If there are any further questions and/or concerns, please do not hesitate in calling me or Mr. Santos. I want to thank both of you for your continued commitment in assisting us in the US Affiliated Pacific Island Jurisdiction.

Sincerely,

  
Joseph Kevin Villagomez  
CNMI Secretary of Public Health  
President, PIHOA

## UNIVERSAL SERVICE QUESTIONNAIRE FOR US-AFFILIATED PACIFIC BASIN JURISDICTIONS

### Contact Information

Jurisdiction: Northern Mariana Islands

Name of individual who filled out the questionnaire: Joseph C. Santos

Title and Institution: Administrator, Department of Public Health

Telephone: 670-234-8950

Fax: 670-233-6030

E-mail: booya@gtepacifica.net

Name of health care contact if different from above: same as above

Telephone:

Fax:

E-mail:

Name of telecommunications company contact: Ms. Kelly Bruce

Name of telecommunications company: GTE Pacifica

Telephone: 670-682-2877

Fax: 670-235-2877

E-mail:

(Please provide a contact name for each telecommunications company from which a quote is obtained)

Attach this sheet when faxing responses to the Universal Service Subsidy  
Questionnaire to Joanne Kumekawa, Director Policy, Office for the Advancement of  
Telehealth, HRSA. [Fax: 301-443-1330] Please fax by March 1, 2000. Thank you.

## UNIVERSAL SERVICE QUESTIONNAIRE FOR US-AFFILIATED PACIFIC BASIN JURISDICTIONS

1. What type of telecommunications connection would you like to use for telemedicine/distance education?
  - Internet store-and-forward
  - Telephone wire line (e.g., fiber optic or cable) or satellite for videoconferencing.
  - Both
2. Do your main health facilities and remote clinics have access to the Internet?
  - If yes, does it involve a long distance phone call to get to the Internet provider? If it does, the health provider can receive the lessor of 30 hours or \$180/ month to pay for the toll charges (i.e. long distance charges) The program only covers toll-charges, not the access fee (i.e. monthly charge from the service provider)
3. Is there a telecommunications provider(s) in your jurisdiction who is able to provide the telecommunications service(s) you want for telemedicine sessions with specialists in an urban area.  
\_\_\_\_yes \_\_\_\_ no [see sheet A for the types of telecommunication services that are eligible to be subsidized under the Universal Service Program]
  - If yes, to which urban area(s) would you anticipate linking for telemedicine consultations?
  - Is there more than one telecommunications provider in the jurisdiction who could provide the service?  
\_\_\_\_yes \_\_\_\_ no [If yes, how many providers are there? \_\_\_\_]
4. For each telecommunications provider, answer the following questions:
  - Would the provider use a land-line connection (e.g., fiber optic cable under the ocean) or a satellite connection? (or does it have the option of either?)
  - Obtain a quote from each provider as to how much it would cost for each telecommunication service you would request. If the service can be provided either via satellite or land-line, obtain a quote for both services. (In year 2 you can request up to a T1 connection. In Year 3, there is no limit in the bandwidth connection)
  - For each urban area in the United States you would anticipate linking to, obtain a quote for telecommunication services to that urban area. For example, if you anticipated that most of your consults would be done to Honolulu and you wanted to use a T1 link, you would obtain a quote for the service (e.g., T1) to Honolulu. If you thought you would consult with Honolulu and Los Angeles at 128kbs, you should obtain quotes for both urban areas at 128kbs. If you anticipate also linking remote clinics to specialists in the urban area, also obtain the cost for the service for each remote site you would link. Your quote should include both a figure for any non-recurring cost and the cost of the service for a year.
  - How many health facilities in your jurisdiction would you want to link directly to the urban facility, recognizing that there is a cost for each link? Please note, only public and private, non-profit facilities are eligible for the subsidy.

Please fax your response to Joanne Kumekawa, Director Policy, OAT: 301-443-1330. Please use the attached sheet to provide the name of a health care contact and telecommunications company contact, including phone, fax and e-mail information for each individual.

**Response to the Universal Service Questionnaire for US-Affiliated Pacific Basin Jurisdictions**

1. We currently are able to perform medical consultations via the Internet in a store and forward method. Satellite, fiber optic and telephone wire line connectivity is available in the CNMI, but all at varying cost. The ideal connectivity speed and method would definitely be via high speed T1 and employ store and forward as well as Video Teleconferencing.

2. The main facility (Commonwealth Health Center) as well as the neighboring islands has access to the Internet. The main facility on the island of Saipan can access an ISP via local direct dial up method. Clinics on the island of Tinian and Rota can access one ISP via local direct dial. To access the other ISPs, clients must call long distance to Saipan. ( Inter-island toll charge is .25 cents per minute)

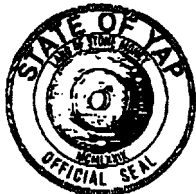
3. The local telecommunications provider in our jurisdiction is able to provide the service we need for telemedicine sessions with specialists in urban areas. We would like to be able to connect to providers in the State of Hawaii, State of California and the Territory of Guam.

The local Telecommunications provider can provide both fiber optic as well as satellite connection.

4. Quotes for fiber connectivity to Hawaii at T1 speed will be provided on a separate cover. Current figures on file are approximately one year old and rates may have increased.

We would like to have the Commonwealth Health Center have a direct link to Urban facilities.





**THE STATE OF YAP**  
**DEPARTMENT OF HEALTH SERVICES**  
**P. O. BOX 148, COLONIA YAP**  
**FEDERATED STATES OF MICRONESIA 96943**



Cable: GovYap  
Tel.: (691)350-2115  
Fax.: (691)350-3444

March 13, 2000

Joanne Kumekawa  
OAT Director Policy  
HRSA  
Washington D.C.  
United States of America  
Fax: 301 443 1330

Dear Ms. Kumekawa:

I am submitting herewith the universal service questionnaire for IIS-Affiliated Pacific Basin Jurisdictions. I tried to submit it earlier but I was unsuccessful, apparently due to technical problem at our end.

The contact persons and address are as follows:

**Telecommunication Company:**

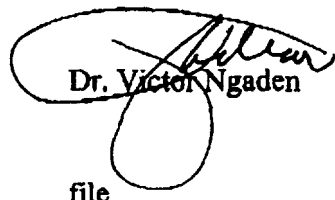
Mr. Samuel Falanruw  
Manager  
FSM Telccom Corporation  
Colonia, Yap 96943  
Phone 691 350 2104  
Fax 691 350 4115

**Health Care contact:**

Dr. Victor Ngaden  
Director of Health Services, Yap  
Colonia, Yap 96943  
Phone 691 350 2115  
Fax 691 350 3444

Thank you very much. If more information is required please let me know.

Sincerely yours,

  
Dr. Victor Ngaden  
file

**Yes. There are many telecommunication service providers in American Samoa, Guam, and the Commonwealth of the Northern Marianas Islands.**

**However, for the Federated States of Micronesia, the telecommunication monopoly and the cost of long distance communications is very high. No government, education, or health agencies have any dedicated off-island capacity. Video teleconferencing application for consultation does not exist due to the cost of telecommunications. Store and forward is very costly over the Internet due to the charges of the ISPs.**

- If yes, to which urban area(s) would you anticipate linking for telemedicine consultations?

**Honolulu to the State of Hawaii Telehealth Access Network (STAN). The network connects 16 hospitals, the Veterans Administration Medical and Regional Office Center (and 5 clinics), and the University of Hawaii John A. Burns School of Medicine and its Telemedicine Project. The UH Telemedicine Project and STAN interconnects 5 clinics as well.**

**STAN also has 15 ISDN BRI's (128 Kbps each) that enables interconnection to sites with ISDN capabilities; three satellite downlinks (C and Ku Band) for satellite receive of CONUS programs; a multipoint conference bridge; high-speed access to the Internet (Internet 2 and through the Maui High Performance Computing Center); and is cross-connected with distance learning networks of the University of Hawaii and the Department of Education.**

3. Is there more than one telecommunications provider in the jurisdiction who could provide the service?  
 \_\_\_yes \_\_\_x\_ no [If yes, how many providers are there? \_\_\_\_]

**The Federated States of Micronesia only has the FSM telecommunication, a monopoly that does not have an independent regulatory body.**

4. For each telecommunications provider, answer the following questions:

- Would the provider use a land-line connection (e.g., fiber optic cable under the ocean) or a satellite connection? (or does it have the option of either?)

**The Federated States of Micronesia only has satellite telecommunications. There is no fiber to any states in the FSM.**

- Obtain a quote from each provider as to how much it would cost for each telecommunication service you would request. If the service can be provided either via satellite or land-line, obtain a quote for both services. *(In year 2 you can request up to a T1 connection. In Year 3, there is no limit in the bandwidth connection)*

**A competitive procurement will need to be followed for the territories of American Samoa and Guam, and also for the Commonwealth of the**

## UNIVERSAL SERVICE QUESTIONNAIRE FOR US-AFFILIATED PACIFIC BASIN JURISDICTIONS

1. What type of telecommunications connection would you like to use for \_\_\_\_\_  
telemedicine/distance education?

- Internet store-and-forward
- Telephone wire line (e.g., fiber optic or cable) or satellite for videoconferencing.
- Both

**Both store and forward and satellite video teleconferencing will be used. The applications include: teleradiology; continuing medical, nursing, and public health distance learning courses; clinical informatics; video teleconferencing consultations; patient-family and off-island medical referral consultations; etc.**

2. Do your main health facilities and remote clinics have access to the Internet?

**Yes - to varying degrees.**

**FSM - There is limited access and use of the Internet due to the costs of the services.**

Monthly charge is \$19.95 plus \$2.00 per hour in excess of 5 hours

Internet service is only available at Yap Memorial Hospital, there is none at any Health centers or dispensaries.

- If yes, does it involve a long distance phone call to get to the Internet provider? If it does, the health provider can receive the lesser of 30 hours or \$180/ month to pay for the toll charges (i.e. long distance charges) The program only covers toll-charges, not the access fee (i.e. monthly charge from the service provider)

**No. None of the Pacific Insular areas have toll charges for Internet access.**

**The cost of Internet is high in the Freely Associated States.**

- **The cost in the RMI is \$60 per month with a \$2.00 per hour charge.**
- **The cost in the FSM is \$19.95 with 5 free hours. A \$2.00 per hour charge follows.**
- **The cost in the Republic of Palau is \$19.00 per month with a \$2.00 charge per hour.**
- Is there a telecommunications provider(s) in your jurisdiction who is able to provide the telecommunications service(s) you want for telemedicine sessions with specialists in an urban area.   X   yes        no [see sheet A for the types of telecommunication services that are eligible to be subsidized under the Universal Service Program]